REMARKS

Claims 1-30 are pending in the present application, of which Claims 1, 8, 16, and 23 are in independent form. For at least the reasons set forth in detail below, Applicants respectfully submit that Claims 1-30 are in condition for allowance.

Rejection under 35 U.S.C. § 102(b)

In the Office Action, Claims 1-30 stand rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,471,613 (herein "Banning"). It is well-established that for a reference to defeat a claim's novelty under 35 U.S.C. § 102, it must disclose each and every element of the claim. Applicants respectfully request that this rejection be withdrawn because Banning fails to teach each and every claim limitation called for in Claims 1-30.

The present application relates generally to methods and systems for processing a collection of tree data structures wherein a set of trees (element 2502 in Figure 25) in the collection of tree data structures is identified, each tree (element 2504 in Figure 25) in the set of trees having a same structure. The methods and systems further call for the forming of a _pattern_ (element 2506 in Figure 25) having the same structure as each tree in the set of trees. Advantageously, the set of patterns 2508 are stored in a database instead of storing the complete structure of every individual tree 2504. (Present Application as published (U.S. Patent Publication No. 2005/0065963), paragraph [0197]). Once formed, the pattern 2508 (as opposed to the individual trees 2504) may be processed (e.g., queried).

In contrast to the present invention, Banning is directed to a system for creating a SQL query, wherein the WHERE or HAVING clause(s) of the SQL query may be graphically represented using a logical arrangement. (Banning, Abstract). More specifically, the system described in Banning allows a user to create a _single_ SQL query tree (e.g., the query tree

illustrated in subwindow 21 in Figure 4C) capable of having more than two leaves per logical node by entering predicates (i.e., leaf nodes), selecting logical operators, and relating the predicates to the operators." (Banning, column 4, lines 36-39). This 'shopping cart'-type approach to creating a query is intended to allow for the creation of a SQL query such that "the user is not burdened with the particulars of the SQL language, but rather can depend upon the intuitive characteristics represented by the tree depiction of the clause." (Banning, column 4, lines 42-44).

Clearly, Banning is directed to a system for creating a single query tree, and does not teach or describe the identification of a set of trees, the forming of a pattern which represents the set of trees, or the processing of the pattern, as called for in Claims 1-30 of the present application.

With regard to independent Claims 1, 8, 16, and 23, the Office Action asserts that column 3, lines 13-37 of Banning teaches "identifying a set of trees in the collection of tree data structures." (Office Action, page 2, section 5). However, in no way does the cited section of Banning describe the identification of a set of trees. Instead, the section describes a prior art representation of a single Boolean factor tree in order to illustrate the lack of an intuitive link between the desired Boolean equation (i.e., (A AND B) OR (C AND D)) and the corresponding graphical representation shown in Figure 2.

The Office Action further asserts that column 4, lines 1-61 of Banning teaches the "forming of a pattern having the same structure as each tree in the set of trees." (Office Action, page 3, section 5). Applicants respectfully disagree. Column 4, lines 1-61 in Banning describes a system whereby a user creates a single query tree wherein the graphical representation of the tree follows a logical arrangement, as opposed to the Boolean arrangement of the prior art approach discussed above. The creation of a query tree described in this section does not relate

to the formation of a pattern representative of a set of trees. Instead, it describes a way for a user to create a tree structure representation by entering predicates (e.g., "SALARY > 100000", "YEAR <10"; and "JOB - 57" shown in subwindow 21 of Figure 4C), selecting the desired logical operators (e.g., the "AND" operator shown in subwindow 21 of Figure 4C) and relating the predicates to the operators. The predicates are merely representative of leaf nodes in a single query tree. The query tree created by the method described in Banning is shown in subwindow 23 of Figure 5E. In contrast to the Examiner's assertion, the section cited by the Examiner does not teach the formation of a pattern of trees and the processing of that pattern, but instead relates to the processing of data using a single query tree. The Office Action fails to show that Banning teaches the identification of a set of trees, the forming of a pattern which represents the set of trees, or the processing of the pattern, as called for in Claims 1-30 of the present application.

Accordingly, because Banning fails to teach each and every element of Claims 1, 8, 16, and 23, and all claims depend thereon, Applicants respectfully request that the 35 U.S.C. §102(b) rejection based on Banning be withdrawn. For at least the reasons set forth above, Claims 1-30 are deemed to be in condition for allowance. Reconsideration and favorable action in this regard is earnestly solicited.

Respectfully submitted,

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